

We claim:

1. A method for stimulating an immune response to a tissue expressing a target differentiation antigen in a subject individual of a first species, comprising administering to the subject individual an immunologically-effective amount of a therapeutic differentiation antigen of the same type as the target differentiation antigen, wherein the therapeutic differentiation antigen is produced by expression in cells of a second species different from the first species.
2. The method according to claim 1, wherein the subject individual of the first species is human.
3. The method according to claim 1, wherein the target differentiation antigen is selected from the group consisting of Melan-A/MART-1, Pmel17, tyrosinase, gp75, gp100, CD19, CD20/CD22 B lymphocyte differentiation markers, muc-1, her2/neu, prostate specific antigen, prostatic acid phosphatase, and prostate specific membrane antigen.
4. The method according to claim 3, wherein the therapeutic differentiation antigen is expressed in insect cells.
5. The method of claim 2, wherein the step of administering is achieved by immunization with a vaccine comprising purified therapeutic differentiation antigen.
6. The method of claim 5, wherein the vaccine also comprises an adjuvant.
7. The method of claim 6, wherein the vaccine also comprises one or more cytokines.
8. The method of claim 2, wherein the step of administering is achieved by immunization with liposomes comprising purified therapeutic differentiation antigen.

9. The method according to claim 2, wherein the therapeutic differentiation antigen is a non-human differentiation antigen.

10. The method according to claim 9, wherein the therapeutic differentiation antigen is a mouse differentiation antigen.

11. The method according to claim 2, wherein the target differentiation antigen is expressed in melanocytes of the subject individual.

12. The method according to claim 11, wherein the therapeutic differentiation antigen is a human differentiation antigen.

13. The method according to claim 12, wherein the therapeutic differentiation antigen is expressed in insect cells.

14. The method according to claim 11, wherein the therapeutic differentiation antigen is a non-human differentiation antigen.

15. The method according to claim 14, wherein the therapeutic differentiation antigen is a mouse differentiation antigen.

16. A method for stimulating an immune response to a tissue expressing a target differentiation antigen in a subject individual of a first species, comprising administering to the subject individual an immunologically-effective amount of a therapeutic differentiation antigen of the same type derived from a second species different from the first species.

17. The method of claim 16, wherein the step of administering is achieved by immunization with a vaccine comprising purified therapeutic differentiation antigen.

18. The method of claim 17, wherein the vaccine comprises liposomes containing purified therapeutic differentiation antigen.

19. The method of claim 16, wherein the step of administering is achieved by immunization with DNA encoding the therapeutic differentiation antigen.

20. The method of claim 19, wherein the DNA immunization is achieved by immunization with liposomes comprising DNA encoding the therapeutic differentiation antigen.

21. The method of claim 19, wherein the DNA immunization is achieved by immunization with gold particles coated with DNA encoding the therapeutic differentiation antigen.

22. A method for stimulating an immune response to a tissue expressing a target differentiation antigen in a subject individual of a first species, comprising removing blood or bone marrow-derived cells from the subject individual, administering to the blood or bone marrow-derived cells an immunologically-effective amount of DNA encoding a therapeutic differentiation antigen of the same type derived from a second species different from the first species, and reintroducing the treated cells back into the subject individual.

23. The method of claim 22, wherein the step of administering is selected from the group consisting of liposomal transfection, particle bombardment and viral infection.

24. A method for stimulating an immune response to a tissue expressing a target differentiation antigen in a subject individual of a first species, comprising administering to the subject individual an immunologically-effective amount of a therapeutic differentiation antigen of the same type as the target differentiation antigen, wherein the therapeutic differentiation antigen is a mutant form of the target differentiation antigen.

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25. The method of claim 24 wherein the mutant is a glycosylation mutant.
26. The method of claim 24, wherein the step of administering is achieved by DNA immunization.
27. The method of claim 26, wherein the mutant is a glycosylation mutant.
28. The method of claim 24, wherein the step of administering is achieved by immunization with a vaccine comprising purified therapeutic differentiation antigen.
29. A non-human cell line expressing a human differentiation antigen.
30. The cell line of claim 29, wherein the cell line is an insect cell line.
31. The cell line of claim 29, wherein the human differentiation antigen is derived from human melanocytes.
32. The cell line of claim 31, wherein the cell line is an insect cell line.
33. The cell line of claim 31, wherein the human differentiation antigen is gp75.
34. The cell line of claim 31, wherein the human differentiation antigen is gp100.
35. The cell line of claim 31, wherein the human differentiation antigen is TRP-2.
36. The cell line of claim 29, wherein the human differentiation antigen is derived from human prostate cells.
37. The cell line of claim 36, wherein the human differentiation antigen is prostate specific membrane antigen.

38. An expression vector comprising a DNA sequence encoding a human differentiation antigen and a promoter region effective to promote expression of the human differentiation antigen in insect cells.

39. The vector of claim 38, wherein the expression vector comprises a baculovirus promoter region.

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